UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
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JUL 23 2009

Betty Yee
Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670

Dear Betty:

This letter responds to the Regional Board's solicitation of public comments regarding issues to be considered in the 2009 triennial review of the Water Quality Control Plan for the Central Valley Region, Sacramento River and San Joaquin River Basins (Basin Plan). We appreciate this opportunity to provide input to the triennial review scoping process. We recommend high priority attention in this triennial review for the issues presented below.

Develop Temperature Criteria to Protect Chinook Salmon and Central Valley Steelhead

The Regional Board's 2005 Workplan states that the current general temperature objective applicable to most Basin waters with aquatic habitat beneficial uses that limits thermal increases to 5° F above natural receiving water temperature is not adequately protective of anadromous fish, particularly during early life stages (Issue 9). In that Workplan, the Regional Board noted that various efforts by State and federal agencies were underway to protect and enhance conditions for these species and that establishing appropriate stream temperature limits would assist these efforts. This issue was assigned high priority. As yet, the Regional Board has not undertaken work to support a potential basin plan amendment for temperature. We recommend that this issue continues to be identified as a high priority in the upcoming Workplan.

Much work on specific species and stream conditions has been conducted through collaborative federal and State efforts including the CALFED Bay-Delta Program Ecosystem Restoration Program and Science Program, the Anadromous Fish Restoration Program and Plan, and more recently the San Joaquin River Restoration Program. The Bay-Delta Water Quality Control Plan (State Water Resources Control Board, 1995) sets a narrative objective of doubling of natural production of chinook salmon and endorses a basin-wide approach to achieving this objective. In its recent Periodic Review of the Plan, the State Board has been urged to pursue this objective more actively, through a coordinated, collaborative basin-wide approach. (See, for example, letter and enclosures to Arthur Baggett from Michael Aceituno, National Marine Fisheries Service, December

15, 2004.) Any work undertaken by the Regional Board on temperature criteria should be conducted in the context of the Bay-Delta Plan narrative objective and plans and activities to support this objective.

In 2003, EPA Region 10 issued regional guidance for developing numeric temperature standards for the Pacific Northwest to protect cold water (salmonid) beneficial uses (see enclosed Fact Sheet). This guidance was endorsed by both NOAA Fisheries and the U.S. Fish and Wildlife Service (FWS). While EPA Region 9 has not adopted similar guidance, we generally support the scientific approach proposed in this guidance, which recognizes the factors of biology, life stage/timing, and the natural thermal patterns. We are discussing the merits of this approach with the North Coast Regional Water Quality Control Board, and would be interested in a similar conversation with the Central Valley Regional Board technical staff and the appropriate offices of NOAA and FWS during this triennial review.

Resolve Disapproved Amendments re: Tributary Rule and Delta Dissolved Oxygen

On May 26, 2000, EPA disapproved three previous amendments to the Basin Plan concerning the tributary rule, dissolved oxygen (DO) objectives for the Delta, and language regarding the federal antidegradation policy. The Regional Board adopted, and on January 6, 2004, EPA approved, an amendment to resolve the disapproval regarding the antidegradation language. The tributary rule and Delta DO disapprovals remain outstanding. The basis for these disapprovals is provided in our correspondence of May 26, 2000 (see items 1 and 2 of Attachment A to that letter). The Delta DO disapproval is discussed further in our letter of July 1, 2002 regarding the 2002 triennial review.

On September 6, 2002, the Regional Board adopted an amendment that would have resolved the tributary rule disapproval by clarifying the Regional Board's use designation process; however, that amendment was withdrawn from State Board consideration in 2003 and, therefore, has never been submitted to EPA for approval. We strongly encourage the Regional Board to complete the process of resolving this disapproval.

EPA and Regional Board staff have discussed options for resolving the Delta DO disapproval. That disapproval could be resolved by deleting the exemption from DO objectives that is currently in the Basin Plan for Delta water bodies "which are constructed for special purposes and from which fish have been excluded or where the fishery is not important as a beneficial use." To our knowledge, no such waters have been identified.

Designate Recreational Uses for Grassland Wetland Water Supply Channels

In EPA's May 24, 2000 action on the 1996 "Grassland amendments" to the Basin Plan, we reserved action on the omission of REC-1 and REC-2 uses for the Grassland wetland water supply channels, pending the Regional Board's submission of additional information from the administrative record to justify this omission, consistent with the

requirements of 40 CFR 131.10(j). Since then, Regional Board staff have informed us that a search of the administrative record did not yield the necessary information. "Recreation in and on the water" are goal uses identified in section 101(a)(2) of the Clean Water Act (CWA). Federal regulations at 40 CFR 131.20(a) require States to re-examine, every three years, any water bodies for which goal uses of the CWA have not been designated to determine if any new information has become available. If such new information indicates that the uses specified in section 101(a)(2) of the Act are attainable, the State must revise its standards accordingly. During the upcoming triennial review, the Regional Board should either submit the necessary information to EPA to justify omission of the REC-1 and REC-2 uses or amend the Basin Plan to designate these uses for the Grassland wetland water supply channels.

Update Numeric Objectives for Toxic Pollutants

We support the current stakeholder group which is currently working with the Regional Board to establish a Delta methylmercury TMDL and supporting Basin Plan amendment which would include methylmercury fish tissue objectives. However, if the TMDL and water quality objectives are not adopted by the time the triennial review Workplan is scheduled to be adopted, we recommend that the Regional Board adopt the draft Delta methylmercury fish tissue objectives as soon as possible.

On August 24, 2007, EPA completed a Reasonable and Prudent (RPM) required by the California Toxics Rule (CTR) Biological Opinion after consultation with the FWS and NOAA Fisheries. The RPM required us to determine appropriate pentachlorophenol (PCP) water quality criteria for waters in which early life stages of salmonids were present, and further, under conditions of low DO and high temperatures. As a result of the RPM, EPA determined that Site Specific Criteria (SSC) should be adopted in waters in CA where early life stages (ELSs) of salmonids are present, and a lower SSC where they may be under conditions of low DO and high temperatures. EPA promulgated freshwater chronic criteria for PCP of 15 ug/l in the CTR for all inland surface waters. EPA is now in agreement with FWS and NOAA Fisheries that more stringent SSC should be adopted in waters containing ELSs of salmonids: 10 ug/l where ELSs of salmonids are present and 5 ug/l in those waters that also have low DO and high temperatures. We recommend that the Regional Board identifies freshwaters in which ELSs of salmonids may be present and includes the updated freshwater PCP criteria for those waters.

Reconsider Se Objectives for Delta-Mendota Canal

Given the bioaccumulative and highly toxic nature of selenium to wildlife, and Mendota Pool's proximity to the wildlife-supporting wetlands of the Grassland watershed, we recommend that the Regional Board accelerate its efforts to identify and implement controls necessary to reduce selenium loading to Mendota Pool. In listing Mendota Pool as impaired by selenium, the Regional and State Boards noted that the Delta-Mendota Canal is likely a primary contributor of selenium to the Pool. While the Pool is subject to the Basin Plan's site-specific selenium objective of 2 ppb monthly mean, the Canal was evaluated for impairment against the CTR criterion of 5 ppb as a 4-

day average. We also recommend the Regional Board consider whether a more protective selenium objective should be applied to the Canal in order to protect the downstream uses in Mendota Pool.

Complete Development of Drinking Water Policy

Development of policies for maintaining water quality for drinking water was identified as a high priority in the Regional Board's 2005 Workplan, and in the interim a number of excellent reports have advanced this important subject. The Regional Board should continue its work on development of a Central Valley drinking water policy as a high priority.

Follow Through on Water Quality Standards Amendments Associated with TMDLs

The Regional Board has several TMDLs under development, and many more awaiting initiation. TMDLs may require revision to beneficial uses, water quality objectives, or policies on implementation, but resources are not currently available to complete this work. We recognize that resources are limited, and encourage the Regional Board to consider options for re-allocating resources, as needed, to ensure appropriate basin planning follow-through on TMDLs.

Coordination with NPDES Program

We also recommend that you use this time to coordinate with Regional Board NPDES staff to ensure that the Workplan continues to include as high priority any Basin Plan activity necessary to support issuance or reissuance of NPDES permits. For example, the 2005 Workplan did a good job summarizing high priority beneficial use designations, many of which would have an impact on NPDES permit issuance. We recommend that you continue to work with Regional Board NPDES staff to see if any new Basin Plan activities may be needed and to ensure that existing high priority Basin Plan activities are carried out.

Thank you, again, for the opportunity to comment on the scope of the 2009 triennial review. Please contact me at (415) 972-3508, or via email at mitchell.matthew@epa.gov if you have any questions. I look forward to working with you as the triennial review progresses.

Sincerely,

Matthew Mitchell

Matthew Mitchell
Standards & TMDL Office (WTR-2)

Enclosure

EPA

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Alaska
Idaho
Oregon
Washington

EPA Issues Final Water Temperature Guidance - April 2003

Water temperature is a critical aspect of the freshwater habitat of Pacific Northwest salmon and trout. These fish, including those listed as threatened or endangered under the Endangered Species Act (ESA), need cold water to survive. Human-caused increases in river water temperatures have been identified as a factor in the decline of ESA-listed fish in the Pacific Northwest. State and Tribal temperature water quality standards can play an important role in helping to maintain and restore water temperatures to protect these salmon and trout and aid in their recovery.

The guidance is intended to assist States and Tribes to adopt temperature water quality standards that EPA can approve consistent with its obligations under the Clean Water Act (CWA) and the ESA. The CWA requires States and authorized Tribes to adopt water quality standards and requires the EPA to approve or disapprove those standards. The ESA requires EPA, in consultation with the federal fisheries agencies, to insure its approval of a State or Tribes's water quality standards does not jeopardize the continued existence of endangered or threatened species.

The guidance represents one approach for water temperature standards that a State or Tribe could adopt that would likely pass the complex approval process. The guidance, however, is optional and States and Tribes can adopt alternative standards as long as EPA determines they meet CWA and ESA requirements.

The guidance is a product of a three year collaborative effort involving the Idaho Department of Environmental Quality, Oregon Department of Environmental Quality, Washington Department of Ecology, NOAA Fisheries (formerly the National Marine Fisheries Service), U.S. Fish and Wildlife Service, Nez Perce Tribe, and the Columbia River Inter-Tribal Fish Commission. EPA issued two public review drafts, the first in October, 2001 and the second in October, 2002, and received valuable comment from the public.

Recommended Temperature Criteria to Protect Salmon and Trout

Applies to the Summer Maximum Temperature

- 12°C (55°F) for Bull Trout Rearing - *generally in the upper portion of river basins*
- 16°C (61°F) for Salmon and Trout "Core" Juvenile Rearing - *generally in the mid to upper part of river basins*
- 18°C (64°) for Salmon and Trout Migration plus Non-Core Juvenile Rearing - *generally in the lower part of river basins*
- 20°C (68°F) plus cold water refugia protection for Salmon and Trout Migration - *generally in the lower part of a few river basins that likely reach this temperature naturally*

Applies Where and When Fish Use a River (generally during the fall-winter-spring period)

- 9°C (48°F) for Bull Trout Spawning
- 13°C (55°F) for Salmon and Trout Spawning, Egg Incubation, and Fry Emergence
- 14°C (57°F) for Steelhead Smoltification

Note: the above criteria are based on the 7 day average of the daily maximum values

Recommendations to Protect Existing Cold Waters

Keeping cold waters cold is important to protect the last remaining high quality fish habitat and help cool downstream river reaches. The guidance, therefore, recommends that State and Tribes adopt mechanisms in their standards that protect waters that are currently colder than the summer maximum numeric criteria.

Recommendations to Protect Fish in the Vicinity of Point-Source Discharges

In some situations, water temperatures in the immediate vicinity of an industrial or municipal discharge may exceed the recommended temperature criteria as long as fish are not harmed from short-term exposure. The guidance recommends that States and Tribes adopt measures to protect fish from temperatures that would be lethal, cause thermal shock, block migration, or harm fish eggs.

What if the Temperature Criteria are Unattainable or Inappropriate?

EPA recognizes that because of the inherent variability of Pacific Northwest rivers and streams there are likely to be situations where the recommended temperature criteria will be unattainable or inappropriate. The guidance offers several approaches a State or Tribe can take to address these situations. For example, where the natural background temperature (i.e., the temperature absent human impacts) is estimated to be higher than the recommended criteria, the natural background temperature can be adopted as criteria. Further, if human impacts cannot be remedied, alternative criteria can be established based on the water temperature that is attainable.

What Are Water Temperature Criteria Used For?

Water temperature criteria serve as goals in order to protect salmon and trout and other uses. Criteria are used for determining what waters do not attain water quality standards (CWA 303(d) list) and require the development of a Total Maximum Daily Load (TMDL), which calculates the temperature reductions needed from contributing sources to meet the criteria. Criteria are also used to set effluent limits for NPDES sources and used by States for non-point control programs.

For More Information

For a copy of the guidance go to EPA's website: www.epa.gov/r10earth/temperature.htm. or call 1-800-424-4372.

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